

## CLAIMS

1. A wound dressing comprising a therapeutic agent and a matrix comprising polymers joined by cross-linkages which cross-linkages comprise, or consist of,  
5 oligopeptidic sequences which are cleavable by a kallikrein such that the rate of release of the therapeutic agent increases in the presence of the protease.
2. A wound dressing according to claim 1, wherein the polymers themselves are not degraded by the kallikrein or other factors that may be present in the  
10 wound environment.
3. A wound dressing according to claim 1 or 2, wherein the polymer is a synthetic polymer.
- 15 4. A wound dressing according to claim 3 wherein the polymer is a polymer of N-(2-hydroxypropyl) methacrylamide (HPMA).
5. A wound dressing according to any one of the preceding claims wherein the oligopeptidic sequences consist of 3 to 15 amino acids.  
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6. A wound dressing according to any one of the preceding claims wherein the oligopeptidic sequence comprises or consists of –Phe-Arg-Ser-Ser-Arg-Gln- or Met-Ile-Ser-Leu-Met-Lys-Arg-Pro-Gln-.
- 25 7. A wound dressing according to any one of the preceding claims wherein the therapeutic agent is an antimicrobial agent, a pain relieving agent, an antiseptic, an analgesic, a local anaesthetic, or a kallikrein inhibitor.
8. A wound dressing according to any one of the preceding claims wherein the  
30 therapeutic agent is incorporated within the matrix.

9. A wound dressing according to claim 8 wherein the wound contacting layer of the dressing may comprise or consist of the matrix within which the therapeutic agent is incorporated.
- 5 10. A wound dressing according to claim 8 wherein the dressing comprises a liquid permeable wound contacting layer, an intermediate layer comprising or consisting of the matrix within which the therapeutic agent is incorporated and an outer, liquid-impervious backing layer.
- 10 11. A wound dressing according to any one of claims 1 to 7 wherein the dressing comprises a barrier layer which comprises the matrix, the barrier layer being for initially separating the therapeutic agent in the wound dressing from wound fluid when in use.
- 15 12. A wound dressing according to claim 11 wherein the barrier layer comprises an apertured sheet having a composition comprising the cross-linked polymers applied thereto in occlusive fashion.
13. A wound dressing according to claim 11 or 12, wherein a layer of the  
20 therapeutic substance is provided behind the barrier layer.
14. A wound dressing according to claim 13, wherein an absorbent layer is provided behind the barrier layer and the therapeutic substance is dispersed in the absorbent layer.
- 25 15. A wound dressing according to claim 14, wherein the barrier layer substantially encapsulates the therapeutic substance.
16. A wound dressing according to any one of the preceding claims wherein the  
30 wound dressing comprises an absorbent layer and/or a backing layer.